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Frederick B. Wagner, Jr., MD, and J. Woodrow
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Part IV: College of Graduate Studies 1965-1979 (pages 919-948)

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In 1969, when Thomas Jefferson University was established, the College of Graduate Studies replaced the Board for the Regulation of Graduate Studies. Dr. Robert C. Baldrige (Fig. 24) was named the first Dean of the College and undertook the responsibility of having the new College recognized as an accredited Graduate School.

During this time the graduate program in the Department of Microbiology received a boost from the THEMIS grant from the Department of Defense. This interdepartmental grant supported research in the Departments of Microbi-

ology, Preventive Medicine and Gastroenterology for the study of diarrheal diseases and was instrumental in supporting faculty and students at the time.

In 1965, Dr. George Royal was appointed Assistant Professor, the first African-American to hold a full-time professorial position at Jefferson. That same year, Dr. George Warren returned to the faculty as Professor of Microbiology. Dr. Warren had been a faculty member in the 1940s and then moved to Wyeth Laboratories where he served as Head of the Department of Microbiology. Members of the department traveled to Costa Rica in 1965 to study the infantile diarrhea epidemic. Dr. Goodner retired in June of 1967. Russell W. Schaedler, M.D., (JMC, '53) was appointed the new Chairman in January of 1968 (Fig. 25). The first academic appointee of the new Chairman was Jussi J. Saukkonen, M.D., who would later become Dean of the College of Graduate Studies. Dr. Junius Clark joined the Department in 1969 to develop the study and teaching of cellular immunology.

The graduate programs in the Department of Physiology continued to mature and in this period 23 master's and doctoral degrees were awarded in physiology, more than in all of the previous years combined. Another graduate of the program was appointed instructor. Eugene J. Zawoiski, Ph.D., a 1963 graduate, taught renal physiology and pursued teratological research as well as studies on central nervous system involvement in gastrointestinal function. In recognition of the need to better understand smooth muscle function, Marion J. Siegman, Ph.D., was appointed instructor in 1967. In 1977 Dr. Siegman was the first woman to be named a professor of physiology at Jefferson. In 1968, Chandra M. Banerjee was named Assistant Professor to replace Sheldon Gottlieb.

Paul H. Maurer, Ph.D., was named Chairman of the Department of Biochemistry in 1966 (Fig. 26). With his accession to the Chair, the Department underwent a marked change in character.

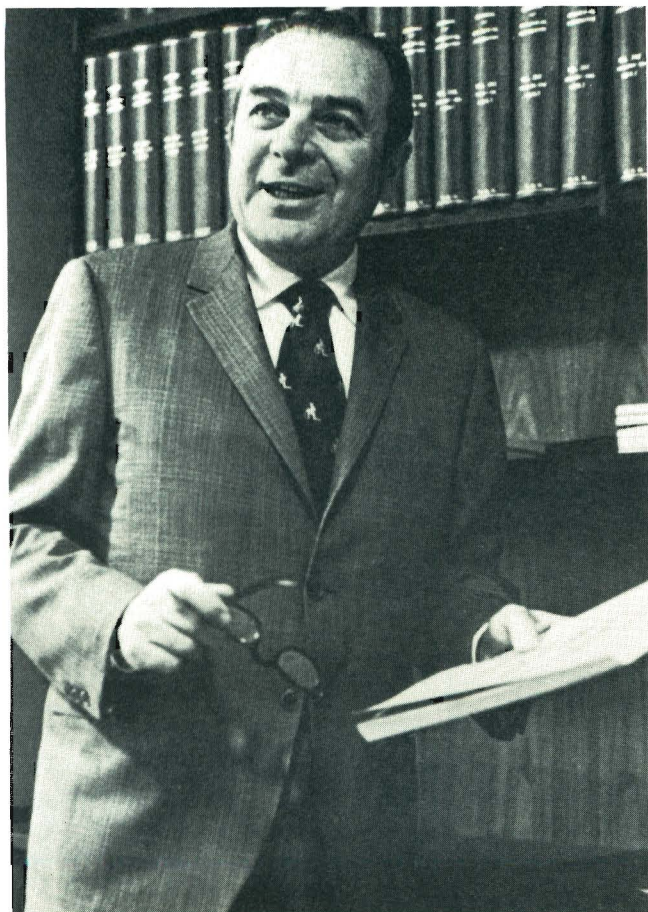


Fig. 24. Robert C. Baldrige, Ph.D., first Dean (1970-81).

Because his major interest was immunochemistry, many of the additional staff members appointed were immunochemists. On the average, the staff in subsequent years consisted of immunochemists and traditional biochemists, including "molecular biologists," in about equal proportions. This hybrid character also was reflected in the various areas of teaching and research.

August Epple, Ph.D. was appointed to the faculty in the Department of Anatomy in 1967 and has stood at the forefront of research into the comparative structure and function of the pancreas and its islets throughout phylogeny of the animal kingdom. Upon receiving his degree from Jefferson, Ronald Jensh, Ph.D. was named to the faculty as its first teratologist. The Department moved its new facilities to the fifth floor of Jefferson Alumni Hall in 1968.



Fig. 25. Russell W. Schaedler, M.D., Chairman of Microbiology (1968-91).

In 1965 a "Graduate Training Program in Public Health" grant was made to the Department of Preventive Medicine with Dr. E. Harold Hinman (Fig. 27) as Project Director and Dr. C. Earl Albrecht as Supporting Director. The experience gained in this graduate training program served as the base for the approval of a three-year residency program in General Preventive Medicine awarded to the Department. This program was designed to train physicians destined for academic appointment in preventive medicine, community medicine, or those interested in associating themselves with administrative responsibility for clinical programs with national, state, or metropolitan health departments. This was a unique program in that it offered variable opportunities for training both in the basic sciences related to preventive medicine such as epidemiology, biostatistics, occupational medicine and nutrition, and in clinical responsibilities. Those completing the program, prepared acceptable theses and passed the examination, earned master of science degrees and became board certified in General Preventive Medicine and/or Occupational Medicine.

Anatomy Alumni

Richard H. Rothman, M.D., Ph.D., (1965), had previously earned his M.D. degree from the University of Pennsylvania and took his surgical training at Jefferson under Anthony F. DePalma, M.D., (JMC, '29). Since January 1986, Dr. Rothman has served as the James Edwards Professor of Orthopaedic Surgery and chairman of the department at Jefferson Medical College. He also became the director of the Rothman Institute at Pennsylvania Hospital, the largest and best recognized facility in the Delaware Valley for orthopaedic implant and reconstructive surgery of the spine and soft tissues surrounding joints. He also opened the city's first Foot Center which complemented Jefferson's already renowned Hand Center. In 1988 he established the Orthopaedic Research Laboratory at Jefferson which was funded by research grants from the National Institutes of Health and the March of Dimes Birth Defects Foundation. He is the author of eight major textbooks and over 100 scientific papers on joint surgery. For his accomplishments, he

was awarded the College of Graduate Studies 1988 Distinguished Alumnus Award (Fig. 28).

Ronald P. Jensh, Ph.D., (1966), has served on the faculty at Jefferson Medical College since 1966 and on the graduate faculty of the College of Graduate Studies since 1970 (Fig. 29). He was named Associate Professor of Radiology in 1974 and Professor of Anatomy in 1982. He has also been Section Chief of Microscopic Anatomy since 1988 and Vice Chairman of the Department of Anatomy since 1984. He was the recipient of the Christian R. and Mary F. Lindback Award for Distinguished Teaching in 1973. A consultant to several private companies, he has also been a member of the Embryology and Human Development Study Section of the NIH. A member of numerous professional societies, he served as president of the Behavioral Teratology Society. He was also a member of the College of Graduate Studies Alumni Association Board of Directors,

serving as its president in 1982 -1984. Dr. Jensh has published more than 100 papers and abstracts in the field of behavioral and radiation teratology and his research concentrates on the effects of prenatal stressors on young adult animals. He has also been active in developing educational computer programs. An accomplished photographer, he has shown his work at a number of photographic art exhibits and won several awards, including one sponsored by the U.S. Department of the Interior and the Minolta Corporation.

Biochemistry Alumni

Richard J. Cenedella, Ph.D., (1966), did post-doctoral work as a Research Associate in Pharmacology at West Virginia University where he was named Senior Research Pharmacologist in 1967 and advanced to Professor of Pharmacology in 1976. Then he accepted the position of Professor and Chairman of Biochemistry at Kirks-



Fig. 26. Paul H. Maurer, Ph.D., Chairman of Biochemistry (1966-85).

ville College of Osteopathic Medicine in Kirksville, Missouri. He was a Visiting Research Fellow at the University of Melbourne, Australia, and named a Fogarty International Senior Scholar of the NIH in 1989. In 1990 he received the Gutensohn/Denslow Award for Research and Teaching from the American Osteopathic Association. Through his research, most recently in the area of lens cholesterol metabolism and lens protein structural changes, he has co-authored 67 articles in refereed journals, two books and chapters in four books.

John J. Ch'ih, Ph.D., (1968), was named Senior Instructor of Biological Chemistry at Hahnemann University in 1969 and advanced to Professor in 1981. He has served as advisor to numerous master's and Ph.D. recipients. For his teaching accomplishments, he was honored with the 1991 Faculty Teaching Award of the Graduate



Fig. 27. E. Harold Hinman, Ph.D., M.D., Chairman of Preventive Medicine (1962-69).

Student Society of Hahnemann. In 1978 he was named a U.S. Public Health Service Senior International Fellow which took him to Taiwan for eight months where he served as Visiting Professor and Scientist. He also served as a Visiting Professor in China for one month in 1987. Dr. Ch'ih's research has focused on the activation, detoxication and translocation of chemical carcinogens in mammalian tissues and cells, and alterations in gene expression during the initiation of chemical carcinogenesis. He also has studied the mechanism of tumor-modulatory agents on the formation of AFB₁-DNA, RNA and protein adducts. Through his research he has co-authored 28 papers and 33 abstracts.

Marianne L. Egan, Ph.D., (1969), was the recipient of the Biochemistry Department's Paul Pinchuk Memorial Award. She was an Assistant Research Scientist in the Department of Immunology at the City of Hope National Medical Center in Duarte, California, until 1977 when she became Research Assistant Professor of Microbiology at the University of Alabama at Birmingham. She served as Scientist in UAB's Comprehensive Cancer Center, later in the Multipurpose Arthritis Center, and in 1981 on the Graduate Faculty in the Molecular Cell Biology Program. In 1984 she was promoted to Research Associate Professor in the Department of Microbiology and in 1987 in the Division of Clinical Immunology and Rheumatology. She served as Chairperson of the Diagnosis and Treatment Working Group of the Breast Cancer Task Force of the National Cancer Institute from 1980 to 1984. Dr. Egan has co-authored 37 publications and three book chapters relating to her work.

Microbiology Alumni

Vu Qui Dai, M.D., Ph.D., (1965), had earned his M.D. in 1959 from the University of Saigon and then was selected to study abroad in a Vietnamese government program designed to replace the country's largely French-national teachers with Vietnamese. He served as a research fellow in virology at the University of Alabama Medical Center for one year and then came to Jefferson. Upon graduation he returned to Vietnam to teach at the University of Saigon Medical School, serving as Professor and Chairman of the Depart-

ment of Microbiology and, later, as Dean of the School of Medicine in 1974-75. Later in 1975 he was held for six month in a communist "re-education" camp. He emigrated to the United States as a refugee in 1982 and completed all examinations and retraining necessary for licensure in this country. Since then he has been a staff physician at Agnews Developmental Center in San Jose, California.

Robert G. Stockmal, Ph.D., D.O., (1969), went on to a D.O. degree at the Philadelphia College of Osteopathic Medicine. From 1968 until 1978 he served as Chairman of the Department of Microbiology and Public Health at the same college. He then joined the Ohio University College of Osteopathic Medicine's Department of Family Medicine as Associate Professor. Since 1982 he has also served in the U.S. Army Reserve Medical Corps as a Lieutenant Colonel. He has held the positions of Staff Flight Surgeon in the 83rd U.S. Army Reserve Command and Officer in

Charge of the Cardiology Team for the 2291st U.S. Army Hospital.

Pharmacology Alumni

William T. Lynch, Ph.D., (1967), worked at Lederle Laboratories from 1966 to 1977 in toxicology, conducting studies required to obtain registration of pharmaceuticals. He then moved to Rohm and Haas Company where he managed toxicology programs for agricultural chemicals.

John E. Stambaugh, Jr., M.D., Ph.D., (1968), was a 1966 graduate of Jefferson Medical College and received his Ph.D. in Pharmacology. He served his residency in medicine at Jefferson and an oncology fellowship at the National Cancer Institute Training Center. He remained at Jefferson, serving in the Department of Pharmacology and rose to full Professor by 1982 (Fig. 30). He also served as Assistant Professor of Medicine from 1976. He has held staff appointments at



Fig. 28. Richard H. Rothman, M.D., Ph.D. (Anatomy, 1965), Chairman of Orthopaedics (1986-), receives Distinguished Alumnus Award (1988) from Gerard McGarrity, Ph.D., President of the CGS Alumni Association.

Cooper Hospital, Underwood Memorial Hospital, West Jersey Health System and Our Lady of Lourdes Hospital. Through his research, he has published 57 articles and 44 abstracts of his work.

Physiology Alumni

Allen Cymerman, Ph.D., (1968), served as a Research Physiologist for the US Army Research Institute of Environmental Medicine (USARIEM) in the Biochemistry and Pharmacology Division until 1972, in the Military Stress Division until 1975 and then in the Altitude Research Division, advancing to Director. In 1990 he became Director of the Altitude Physiology and Medicine Division at USARIEM. He has co-authored over 70 articles, book chapters and technical reports and has made 122 abstracts and presentations to medical and scientific communities. His work has been in the area of environmental physiology,

stress, and physical and mental performance with particular emphasis on performance at high terrestrial elevations.

Eli Fromm, Ph.D., (1967), had earned both baccalaureate and master's degrees in engineering at Drexel University and returned there upon graduation from Jefferson to hold a series of academic appointments that involved him in teaching, research, administration and grants management. He was named Professor of Biomedical Sciences in 1980 and then Professor of Electrical and Computer Engineering in 1983. He was Interim Dean of Drexel's College of Engineering in 1989 and then Vice Provost for Research and Graduate Studies in 1990. In 1980 through 1981 he also served on the U.S. House of Representatives Committee on Science and Technology as a Congressional Science and Engineering Fellow where he participated in policy formation and legislative committee activity. He also served as

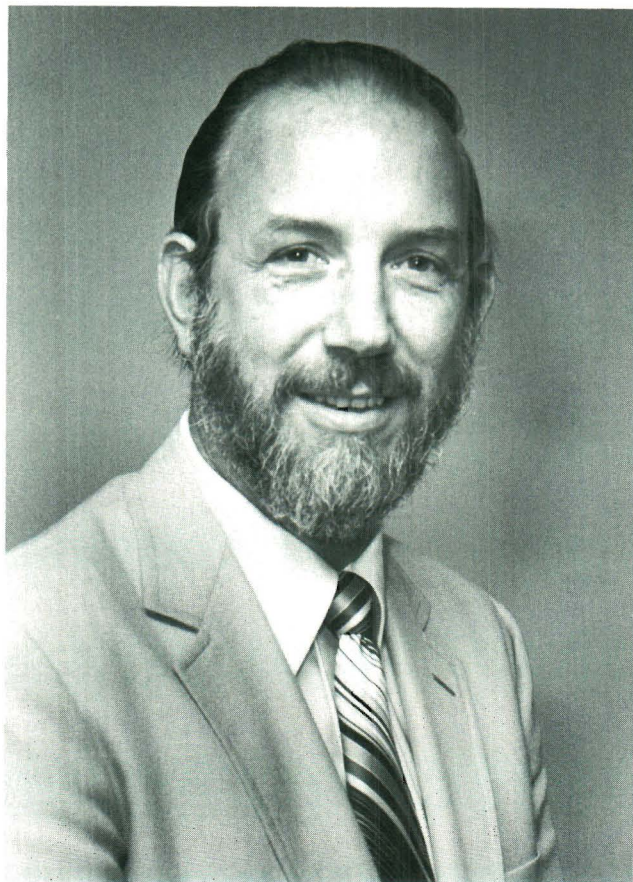


Fig. 29. Ronald P. Jensh, Ph.D. (Anatomy, 1966), Professor of Anatomy at Jefferson.



Fig. 30. John E. Stambaugh, Jr., M.D., Ph.D. became a full Professor of Pharmacology at Jefferson.

the Director of the Bioengineering Program of the National Science Foundation in 1983 and 1984. He has published more than 50 scientific/technical publications relating to fields of research thrusts in physiology, bioengineering, electronics and engineering education, plus congressional documents relating to the FDA approval process, authorization of NSF, National Technologic Foundation, Innovation and Productivity, reindustrialization and economic competitiveness, export control and biotechnology.

Mary D. Osbakken Holmes, M.D., Ph.D., (1969), went on to earn a master's degree in biomedical engineering from Drexel University and then an M.D. degree from Temple University Medical School. She completed her internship and residency in internal medicine at Pennsylvania Hospital in 1977 and then served three fellowships in cardiology, at Temple University Hospital, the University of Pennsylvania and Massachusetts General Hospital. She served as Assistant Professor in the Department of Medicine and Radiology and as an internist and cardiologist at the Milton S. Hershey Medical Center from 1980 to 1985. She then returned to the University of Pennsylvania as Assistant Professor of Anesthesia and Biochemistry/Biophysics. In 1988, she was also named Assistant Professor of Medicine at the Hospital of the University of Pennsylvania. Among numerous editorial appointments, she served as a referee to *American Journal of Cardiology* and the *Journal of Magnetic Resonance in Medicine*, a reviewer to *Journal of Clinical Investigation*, and on the editorial board of *Cardiology*. Through her research, largely in the area of cardiology, she has published 52 papers, two books and 86 abstracts.

Melvin A. Johnson, Ph.D., (1969), had previously taught biology at Central State University in Wilberforce, Ohio. Upon graduation from Jefferson, he became Chairman of the Department of Biology there. He was later promoted to Professor. He also served as Professor of Physiology at Wright State University School of Medicine from 1974 to 1985 and in 1985 he was named Dean of the College of Arts and Sciences at Central State. Active in the American Heart Association, he was also appointed to the Heart Association's national level Committee on Minority

Involvement. He is a charter member of the National Minority Health Affairs Association and the Wright State University Academy of Medicine. Dr. Johnson was elected to the Board of Directors of the College of Graduate Studies Alumni Association in 1983. As a board member he outlined recruitment strategies for the College to attract and recruit minority graduate students and made available information about the Minority Access to Research Careers program. In addition to his responsibilities in academic administration, Dr. Johnson continued to conduct research in the area of cardiovascular physiology and published 17 papers in that area (Fig. 31).

David S. Marsden, Ph.D., (1968), has since 1968 been employed at The Roosevelt Hospital, New York, in the Department of Radiology, recently as Director of the Medical Physics and Radioisotope Laboratories. He has had responsibility for training residents and technicians, and also acts as hospital radiation safety officer and supervisor of the isotope laboratory. He conducted research on the use of radio-isotopes in the diagnosis of gastrointestinal disorders. He was certified by the American Board of Radiology as a Radiological Physicist. Dr. Marsden has also served as Assistant Professor of Radiology at Columbia University and as Chairman of the Roosevelt Hospital Radiation Safety Committee. Active in the National and New York Clinical Radioassay Societies, he has been president and treasurer of both.

Zalmon Pober, Ph.D., (1968), served as a physiologist at the Food Science Laboratory at the U.S. Army Natick Research and Development Command in Massachusetts from 1968 to 1976 where, among other responsibilities, he planned and conducted research programs in nutrition, nutritional physiology and gastrointestinal physiology. In 1976 he was named Assistant Professor of Physiology and Pharmacology at Massachusetts College of Pharmacy and Allied Health Sciences where he was promoted to Associate Professor in 1981. Since 1983 he has also served as Adjunct Instructor in Biomedical Materials at Western New England College's School of Engineering. He earned his M.B.A. degree in 1984 and, since 1985, he has been a consultant to Continuing Professional Education Services

where he is responsible for design, accreditation and marketing of continuing education programs for health care professionals. Among his gastrointestinal function research accomplishments are the establishment of the presence of enterogastric reflexes in the intestinal phase of gastric secretion, characterization of factors that make protein a stimulus for the intestinal phase of gastric secretion and determination of the effects of topical anesthetics on intestinal receptors controlling food intake.

Margaret Johnson Roach, Ph.D., (1968), while at Jefferson, studied in the Cardeza Foundation for Hematologic Research. Upon graduation she joined the Medical Center of Delaware to establish its Coagulation Laboratory of which she was Scientific Director. Her publications have centered around qualitative platelet structural and functional abnormalities. These studies were performed on two families who live near Wilmington, Delaware who have very rare and different platelet disorders. The platelets from these

families have been studied by many national and international investigators. Dr. Johnson has served as protocol coordinator for the medical center's Research and Human Rights Committee and coordinator of the Institutional Review Board. For six years she lectured nationally and regionally on coagulation for the American Society of Clinical Pathologists. Dr. Johnson was a volunteer for Immaculata College, her undergraduate institution, serving as President of its Alumni Association and Chairman of the President's Council. In 1989 she was honored with the Immaculata Medal, the College's highest award to an alumnus. In 1990 she was appointed to the Jefferson College of Graduate Studies Alumni Association Board of Directors and served as Chairman of its Fund Raising Committee.

In Min Young, M.S., M.D., (1966) had earned his M.D. degree in 1948 from Yonsei University College of Medicine in Seoul, Korea. He came to Jefferson in 1960 as a research associate in otolaryngology and rose to full Professor of Otolaryngology.



Fig. 31. Melvin A. Johnson, Ph.D. (right) with Leonard M. Rosenfeld, Ph.D. on Alumni Day (1984).

ymology (Audiology) in 1972. Additionally, he served as a research audiologist from 1965 to 1972 on an NIH training grant for the College. He has also served as training supervisor for the audiology practicum for Temple University and as a lecturer in audiology at the Naval Regional Medical Center. He was appointed Visiting Professor of Yonsei University College of Medicine in 1986. Through his research, he has published over 60 articles and 90 abstracts.

Pathology Alumni

Mark D. Brown, M.D., Ph.D., (1969), received his M.D. degree in 1965 from Jefferson. Upon graduation he served as an instructor in Orthopaedics until 1971. He was then appointed Staff Orthopaedic Surgeon at the Bethesda Naval Hospital until 1973. He subsequently held several academic positions at the University of Miami School of Medicine. Beginning as a fulltime faculty member, he advanced to Professor of Orthopaedics and Rehabilitation in 1982 and was named Chairman in 1986 (Fig. 32). He has also been Associate Director of the Tissue Bank since 1979. In 1981 he conducted research in the Departments of Orthopaedics and Anatomy at the University of Goteborg in Sweden. A national expert on diseases of the spine and treatment of spinal disorders by surgical modalities and enzyme injections, he has held two patents, and has authored 59 papers, one text book, and chapters in eight texts. He served as Associate Editor for *Clinical Orthopaedics and Related Research* and on the editorial board for *Spine*. Dr. Brown was the 1989 recipient of the Eastern Orthopaedic Association Award for Spinal Research.

William Lawrence Drew, M.D., Ph.D., (1966), was a 1962 graduate of Jefferson Medical College. He completed an Assistant Residency in Medicine at the University of California Hospital, San Francisco, in 1968 and then was an NIH Fellow in Clinical Microbiology at the University of

Washington in Seattle. Since 1969 he has been Director of the Clinical Microbiology and Virology Laboratory, and in charge of infectious diseases at Mount Zion Medical Center at UCSF. In 1985 he was named Associate Professor of Laboratory Medicine and Medicine (Fig. 33). He was also made Director of the Biskind Pathology Research Laboratory in 1980 and Director of AIDS Services in 1988. He has spoken extensively at national and international meetings and published more than 75 papers, most recently in the areas of viral and infectious diseases and AIDS.

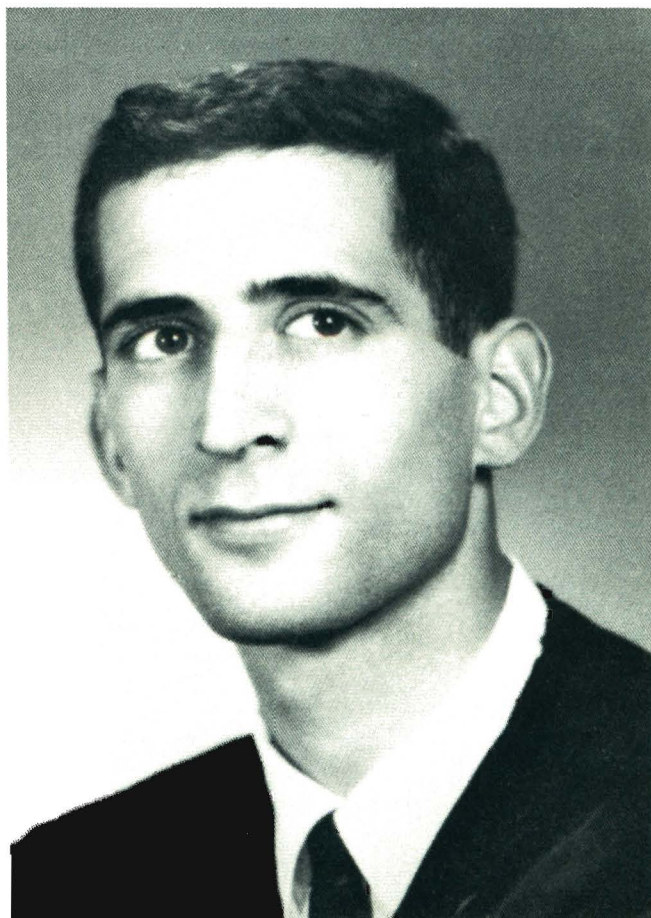


Fig. 32. Mark D. Brown, M.D., Ph.D., Professor of Orthopaedics and Rehabilitation, University of Miami School of Medicine.

1965 Dhamabutra, Narathorn, M.D.,
Microbiology
Do, Nhaun Thi, M.S., Microbiology
Lectura, Felix V., M.S., Anatomy
Pant, Keshab D., Ph.D., Microbiology
Rahman, Mohammad A., Ph.D.,
Microbiology
Rothman, Richard H., Ph.D., Anatomy
Vu, Dai Qui, Ph.D., Microbiology

1966 Cenedella, Richard J., Ph.D., Biochemistry
Daley, Daniel J., Jr. M.S., Physiology
Drew, William L., Ph.D., Pathology
Hasan, Syed I., M.S., Microbiology
Jensh, Ronald P., Ph.D., Anatomy
Rioux, Ernest, Ph.D., Physiology



Fig. 33. William L. Drew, M.D., Ph.D., Associate Professor of Laboratory Medicine and Medicine, University of California (San Francisco).

Tri, Le Minh, Ph.D., Physiology
Vipatapatya, Vimonvan, M.S., Physiology
Young, In Min, M.S., Physiology

1967 Cady, William, M.S., Physiology
Freundlich, Jerome J., Ph.D., Physiology
Fromm, Eli, Ph.D., Physiology
Gold, Alan, M.S., Preventive Medicine
Hartman, Herbert H., M.S., Pharmacology
Huang, Joseph C., M.S., Pharmacology
Husain, Azam, M.S., Physiology
Joshi, Prakashchanda C., M.S., Physiology
Lynch, William T., Ph.D., Pharmacology
Miller, Neil, Ph.D., Physiology
Moreno, Oscarr M., Ph.D., Pharmacology
Neff, Ray A., M.S., Pharmacology
Spears, Ruth Ann, Ph.D., Microbiology
Woo, Chi Yuan, M.S., Physiology

1968 Ambromovage, Anne M., Ph.D.,
Physiology
Ch'ih, John Juwei, Ph.D., Biochemistry
Cinti, Dominick L., Ph.D., Physiology
Cymerman, Allen, Ph.D., Physiology
Drezner, Allen D., Ph.D., Pathology
Fonte, Donald A., Ph.D., Anatomy
Johnson Roach, Margaret M., Ph.D.,
Physiology
Kim, Nam H. Lee, Ph.D., Pharmacology
Kyriazis, Andrew P., Ph.D., Pathology
Marsden, David S., Ph.D., Physiology
McAlack, Robert F., Ph.D., Microbiology
Pober, Zalmon, Ph.D., Physiology
Rhode, Solon L., III, Ph.D., Pathology
Salam, Syed A., Ph.D., Microbiology
Stambaugh, John E., Jr., Ph.D.,
Pharmacology

1969 Brown, Mark D., Ph.D., Pathology
Cramer, Eva Brown, Ph.D., Anatomy
Dettmer, Cornelia M., Ph.D., Physiology
Egan, Marianne L., Ph.D., Biochemistry
Holmes, Mary Osbakken, Ph.D.,
Physiology
Johnson, Melvin A., Ph.D., Physiology
Lambert, William C., Ph.D., Pathology
Laxon, Jaclynne Horn, M.S., Physiology
Leung, Christopher K., Ph.D., Anatomy
Msuya, Philemon M., Ph.D., Biochemistry
Pierce, Lauretta, Ph.D., Physiology
Stockmal, Robert G., Ph.D., Microbiology
Vukovich, Robert A., Ph.D., Pharmacology

Dr. E. Marshall Johnson (Fig. 34) succeeded Dr. Andrew J. Ramsay as Chairman of the Department of Anatomy and Director of the Daniel Baugh Institute in the fall of 1972. A goal of Dr. Johnson on assuming the post was to use the umbrella of the Daniel Baugh Institute to develop an interdisciplinary program consistent with contemporary modes for organization of academic research-educational units. This was to be achieved by recruiting new faculty in the area of developmental biology-teratology to build a critical mass of research expertise that would be nationally and internationally competitive for extramural research support and also be a point

of recognition for the University. A second goal was to enhance the neurobiology component of the Department to begin development of contemporary expertise in cellular biology.

The Clinical Microbiology master's degree program was launched in 1972 with 15 students enrolled. In response to the need for advanced training for medical technologists, the program was spearheaded by Dr. Randall, who was Chief of the Microbiological Laboratories, and Dr. Mandile. In 1971, Dr. E. Frederick Wheelock was appointed Professor of Microbiology. Other appointments during this period included Stephen Toy, Ph.D., and Preston Marx, Ph.D.

In the Department of Pharmacology, substantial research programs other than in toxicology were also being pursued at this time. In psychopharmacology and neuropharmacology, research was directed toward the relationship between both normal and abnormal brain and nerve chemistry on the one hand, and the action and metabolism of drugs on the other hand, with the hope of revealing information leading to improvements in the drug treatment of diseases affecting the brain and nervous system. Other research involved the micro-injection of psychoactive drugs into specific sites of the brain and the recording of the electrical activity from those and related brain centers, to better understand the biochemical basis for neuropsychiatric disorders and provide a basis for more effective drug therapy. Also, an extensive investigation was carried out on the function and importance of taurine in the central nervous system, the eye, and the heart of different species of animals. Other research involved studies of the roles of arachidonic acid and the prostaglandins in relation to platelet aggregation and the use of aspirin and modification of the diet to reduce platelet aggregation.

Dr. Friedman retired as Chairman of the Department of Physiology in June of 1974 and was succeeded by Allan M. Lefer, Ph.D. (Fig. 35). Dr. Lefer came to Jefferson and turned the



Fig. 34. E. Marshall Johnson, Ph.D., Chairman of Anatomy (1972-).

Department's research focus from gastrointestinal to cardiovascular. He also established international relationships that would result in a continuing series of visits to the Department of both junior and mature scientists. The first such visitor was Dr. Minuro Okuda, an academic clinician from Japan, who served as visiting associate professor and research associate from 1974 to 1976. Dr. Lefer also appointed two new faculty members, Drs. Michael J. Rovetto and James A. Spath, Jr.

Although no Department of Physics existed at the College, arrangements were made with the Bartol Research Foundation of the Franklin Institute Department of Physics to have it recognized as the Department of Physics at Jefferson. This provided a mechanism for this group to offer a graduate program, the degrees being granted by Jefferson under the regulations established for



Fig. 35. Allen M. Lefer, Ph.D., Chairman of Physiology (1974-).

the basic science departments. The program received approval in 1968 and continued until 1977 when Bartol moved from its original location in Swarthmore to the University of Delaware. In all, Jefferson awarded seven Ph.D. degrees and two M.S. degrees in physics during the program's existence.

Anatomy Alumni

Thomas L. Lewis, O.D., Ph.D., (1974), held a postdoctoral position at Washington University School of Medicine in the Department of Ophthalmology and in 1976 was named Director of the Division of Biological Sciences at the Pennsylvania College of Optometry. In 1978 he was named Chief of the Professional Staff of the Eye Institute at the College. He was named Dean of Academic Affairs and Associate Professor of Anatomy in 1979. In 1989 he was named President of the Pennsylvania College of Optometry. He has served as Chairman of the Section on Anatomy and Pathology and for the Examination Council of the National Board of Examiners in Optometry. He has also served on the review board of *Journal of Optometric Education* and on the editorial council for the *American Journal of Optometry and Physiological Optics*.

Biochemistry Alumni

Samuel G. Franklin, Ph.D., (1973), was the winner of the Department's Paul Pinchuck Memorial Prize for Outstanding Biochemistry Student. He was an NIH postdoctoral fellow at the Institute for Cancer Research in Philadelphia where he was promoted to Research Associate in 1976 and Senior Research Associate in 1981. His research there focused on the purification and characterization of Hepatitis B Virus Binding Substance (IgM) by immunochemical and biochemical techniques. In 1983 he became Senior Research Biochemist at Revlon Health Care Group in New York. He held that position until 1985 when he moved to Smith Kline and French Laboratories as Senior Investigator. In 1988 he was promoted to Assistant Director of the Protein Isolation Group where he has been involved in the design of protein isolation and purification procedures for novel (third generation) thrombolytics, human immunodeficiency virus and related

and other recombinant proteins. He has published 15 articles.

Lorraine Haeffner-Gormley, Ph.D., (1971), had worked with Dr. O. Dhodanand Kowlessar in various medical college-related laboratories conducting gastroenterology research since 1957. In 1970 she was named an instructor in the department of medicine, division of gastroenterology at Jefferson. In 1975 she accepted a position as Associate Director of the Steroid Research Laboratory at Crozer-Chester Medical Center. In 1978 she moved to the University of Delaware to serve as Research Associate in the department of chemistry. She has published 19 articles relating to her work which is in the area of protein/peptide biochemistry on function/structure relationships.

Yu Chen Lin, Ph.D., (1971), was named an Instructor in the Department of Biochemistry at the Philadelphia College of Osteopathic Medicine where she was later elevated to full Professor of Biochemistry. In 1980 she was awarded the Christian R. and Mary F. Lindback Foundation Award for Distinguished Teaching. She has served on the College's Research, Appeals, Honors and Awards, and Academic Standing Committees. She has published nine articles, 17 abstracts and nine sponsored publications.

Glenn Charles Van Tuyle, Ph.D., (1972), won Biochemistry's Paul Pinchuk Memorial Award for Outstanding Research. He received a postdoctoral appointment in the Department of Biochemistry at the State University of New York, Stony Brook, where he stayed until 1974. He then was appointed Assistant Professor of Biochemistry at Virginia Commonwealth University and promoted to Associate Professor in 1980. In 1983-84 he was a visiting scientist at the Swiss Institute for Experimental Cancer Research in Lausanne, Switzerland. He has published 14 papers and 16 abstracts of his work, most of it in the area of mitochondrial DNA.

Microbiology Alumni

Frederick C. Blank, M.S., (1974), prior to attending Jefferson, had earned a bachelor's degree in Dairy Husbandry at Delaware Valley College and then began post graduate studies at the University of Maryland while working at the

U.S.D.A. Agricultural Research Center. He was then drafted for service in the Vietnam War for five years and served as a Clinical Laboratory Officer at Army Hospitals where he became familiar with malaria and meningococcal meningitis, among other tropical diseases. At his last duty station in Fort Dix, New Jersey, he became familiar with Malcolm Artenstein, who eventually developed the Adeno and Rhino virus vaccines, and who provided Mr. Blank with an introduction to medical research methodologies. Following his discharge, he became an Assistant Microbiologist with E.G. Scott at the Wilmington Medical Center who sent him to study anaerobic bacteriology at the Mayo Clinic and encouraged him to enroll in Jefferson's clinical microbiology program. After graduation he accepted a position as Senior Microbiologist at Crozer-Chester Medical Center. After five years he resigned to embark on an entirely new career as a restaurateur.

Georganne Kretschman Buescher, M.S., Ed.D., (1974), in 1976 was named Assistant Professor in the Department of Medical Technology at Jefferson's College of Allied Health Sciences where she advanced to Associate Professor in 1980. She served as Acting Chairman of that Department from June 1980 to June 1981 and from June 1987 to September 1987. She served on numerous College Committees and was Chairman of the Faculty Committee on Appointment, Promotion and Tenure and the Faculty Affairs Committee. She earned her doctorate in education at Temple University in 1984 and in 1988 she was named an Instructor in the Department of Microbiology and Immunology at Jefferson Medical College and Director of the "Masters in Microbiology" Program for the College of Graduate Studies. She also served as the Coordinator of the Master of Science Program in Biomedical Chemistry which was begun in 1990. She was appointed as Director of the Basic Science M.S. Programs for the College of Graduate Studies as she continued to hold the position of Instructor in Microbiology for the Medical College. Among her many activities at Jefferson, she was President of the Faculty Club in 1986-1987 and President of the College of Graduate Studies Alumni Association from 1984 to 1986 (Fig. 20). Dr. Buescher has served on the

Advisory Boards for the Medical Laboratory Technician Programs at Manor Junior College and Montgomery County Community College as well as Guest Lecturer for the Medical Technology program at the University of Delaware. She has made numerous presentations of her research, which recently focused on borderline oxacillin-resistant *Staphylococcus aureus*, at meetings of the American Society of Microbiology. She has authored five publications.

Diane Blechman Feik, M.S., (1974), went on to serve as Supervisor of the Clinical Microbiology Laboratory at Albert Einstein Medical Center until 1987. She then accepted a position as Laboratory Testing Supervisor in the Microbiological Testing Laboratory at the University of Pennsylvania School of Dental Medicine in periodontology and oral microbiology. She has presented her work at the 1988 and 1989 national American Society of Microbiology meetings. Mrs. Feik was one of the founding members of the Clinical Microbiology Alumni Group, serving through the years on its board and as president.

Prabhavathi B. Fernandes, Ph.D., (1974), accepted a postdoctoral position at Jefferson in the laboratory of Dr. Charles Panos where she studied the chemistry of lipids. She then moved on to further postdoctoral work at the Institute for Cancer Research at Fox Chase Cancer Center and then at Temple University as a research assistant professor. In 1980 she became Senior Research Microbiologist in In Vivo Microbiology at the Squibb Institute for Medical Research. She moved on to Abbott Laboratories as Project Leader in General Microbiology in 1983 but returned to Squibb as Director of Microbial Genetics and Biochemistry in 1988. For genetics, she has been responsible for heterologous expression in yeast and bacteria and also for developing screens using novel targets for therapeutic agents in the area of antibacterials, antivirals, biosynthesis of cholesterol, oncogenes and cardiovascular areas. In biochemistry, she has been responsible for identifying novel targets for therapeutic agents and determining the selectivity of novel compounds for these targets. She has published over 50 articles and presented her work at more than 70 national and international meetings.

Robert G. Lahita, M.D., Ph.D., (1973), com-

pleted the combined M.D./Ph.D. program in microbiology. He finished his postgraduate training in internal medicine at New York Hospital—Memorial Hospital for Cancer and Allied Diseases until 1976 and then served as research associate and postdoctoral fellow in immunology at Rockefeller University. He held numerous academic positions in medicine and in clinical pharmacology at New York Hospital-Cornell University, at Rockefeller University Hospital for Special Surgery, and Columbia University College of Physicians and Surgeons with the rank of Associate Professor. He has also been Senior Attending Physician at Rockefeller University Hospital, Hospital for Joint Diseases, Beth Israel Medical Center, New York Hospital and St. Luke's Roosevelt Medical Center. In 1990 he was appointed Chief of Rheumatology and Connective Tissue Diseases at St. Luke's. He has published 60 articles and 38 abstracts of his work. Dr. Lahita became Chairman of the Board of Directors for the Lupus Foundation of America and has served on the editorial boards for *Clinical and Experimental Rheumatology* and *Journal of NIH Research*.

Susan M. Luscombe, M.S., (1972), **M.D.**, (1975), went on to Jefferson Medical College for her M.D. in 1975. She completed an internship at Jefferson in 1976 and served her residency in ophthalmology at Temple University Hospital in 1979. This was followed by a one-year fellowship in anterior segment surgery at Bascom Palmer Eye Institute. Working in private practice, she has been an international consultant on modern microsurgical cataract procedures, laser surgery and glaucoma surgery.

Gerard J. McGarrity, Ph.D., (M.S. 1964), **Ph.D.**, (1970), in 1965 began his association with the Coriell Institute for Medical Research as a Research Associate and advanced to Head of the Department of Microbiology, Vice President for Scientific Affairs and President in 1986. He served as a Clinical Instructor in the Department of Surgery at the University of Pennsylvania School of Medicine from 1970 to 1975. He has also been Adjunct Professor of Microbiology at Robert Wood Johnson Medical School since 1985, Adjunct Faculty in Cell Biology at the State University of New York, Plattsburgh, since 1984, and Adjunct Professor of Microbiology at Jefferson Medical Col-

lege since 1984. He was on the NIH Recombinant DNA Advisory Committee and later served as its Chairman. He was an exchange Visitor from the National Academy of Sciences to the Czechoslovakian Academy of Sciences, and President of the Board of Directors of the International Association for Cell Culture. Dr. McGarrity served as a member of the College of Graduate Studies Alumni Association Board of Directors from 1984 to 1990 and as its president from 1988 to 1990. In 1986 he won the College's Distinguished Alumnus Award. He was elected to the Thomas Jefferson University Board of Trustees in 1989, the first College of Graduate Studies Alumnus to hold a University Board position (Fig. 36). He has over 90 scientific publications, largely in the areas of mycoplasma, cell culture techniques and environmental mutagenesis.

David H. Much, Ph.D. (1971), completed an

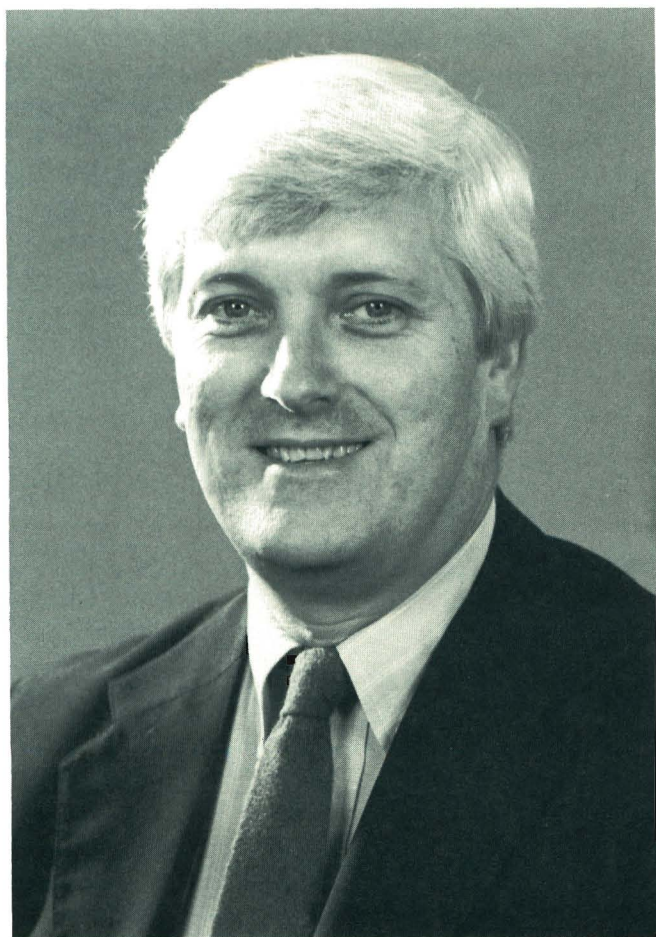


Fig. 36. Gerard J. McGarrity, Ph.D., Adjunct Professor of Microbiology and member of Jefferson's Board of Trustees.

NIH postdoctoral fellowship at New York University Medical School and then held academic positions at Princeton University, Franklin and Marshall College and Texas Wesleyan College. He became Associate Professor of Biology and Microbiology and Immunology at Muhlenberg College in Allentown, Pennsylvania. From his research, largely in the area of sexually transmitted diseases, he has published 13 articles and made nine presentations at professional meetings.

Roger P. Orcutt, Ph.D., (1972), assumed a position as Director of Quality Control at the Charles River Breeding Laboratories where he was promoted to Director of Research and Development in 1979. He served as Director of the Animal Health Diagnostic Laboratory at the National Cancer Institute's Frederick Cancer Research Facility in 1981/82. In 1978 he was requested by the National Cancer Institute to develop standard microflora for all NCI nucleus stock animals. This was subsequently adopted by major suppliers, not only for their isolator animals, but for all of their barrier-reared animals as well. Dr. Orcutt has been past president of the Association for Gnotobiotics and became an internationally recognized authority on infectious diseases in laboratory animals.

John F. Salventi, Ph.D., (1974), worked as a clinical microbiologist at Allentown and Sacred Heart Hospital Center (which later became Lehigh Valley Hospital Center) until 1981. He then served as a consulting clinical microbiologist and was promoted to Director of the Clinical Laboratories at Lehigh Valley Hospital Center in 1981. After an interval, he returned to the Allentown Hospital—Lehigh Valley Hospital Center as Vice President of Operations in 1987. His responsibilities have included operations of clinical support services, implementation of the quality improvement process and oversight of the consolidation of the Allentown Hospital and the Lehigh Valley Hospital Center.

Owen S. Weislow, Ph.D., (1971), was a postdoctoral fellow in immunology at the University of South Florida College of Medicine until 1971 and then in immuno-virology with Dr. E. Frederick Wheelock at Jefferson until 1973. He was then named an instructor in Jefferson's Depart-

ment of Microbiology. In 1974 he became Associate Foundation Scientist at the Southwest Foundation for Research and Education in San Antonio. In 1976 he was named Head of the Support of Developmental Biology and Biochemistry Section at Litton Bionetics, Inc. and Program Resources, Inc. in Frederick, Maryland where he was named Head of the Technical Support Group and Monoclonal Antibody Working Group in the Biological Products Laboratory in 1984. In 1987 he was named Head of their Anti-AIDS Virus Drug Screening Laboratory. Through his current research, in the area of AIDS antiviral chemotherapy, he developed laboratory and high capacity cytoprotection assays used to screen in excess of 30,000 natural products and synthetics per year against the AIDS virus. He has published 35 papers and made numerous presentations.

Loretta F. Rocco, M.S., (1974), was Supervisor in Jefferson's School of Medical Technology from 1965 to 1968. She then served as Supervisor of the Microbiology and Immunoserology Laboratories from 1970 to 1979 at Methodist Hospital where she also served on the Infection Control Committee. In 1979 she was named a Surveyor for the Joint Commission for Accreditation of Hospitals and in 1981 she accepted the position of Infection Control Practitioner at Pennsylvania Hospital. In 1982 she returned to teaching as Medical Technology Teaching Coordinator at Hahnemann University School of Allied Health Sciences. Miss Rocco passed away in November of 1983. In her memory, her family established the Loretta Rocco Memorial Award, an annual scholarship given to outstanding students studying for the master of science degree in microbiology.

Pathology Alumni

Richard H. Conklin, M.D., Ph.D., (1970), studied at Jefferson from 1963 to 1966 and then entered medical school at Upstate Medical Center of the State University of New York where he earned his M.D. degree in 1969. Following training in pathology and infectious diseases (virology and immunology) he became Associate Professor of Pathology and Laboratory Medicine at the University of Texas Medical School, Hous-

ton. Dr. Conklin served as a consultant for water quality on the space shuttle for NASA, for the Rift Valley Fever Vaccine for the U.S. Army, and for the Marine Animal Resource Center in Seattle, Washington.

Pharmacology Alumni

Steven W. Bass, Ph.D., (1970), studied cardiovascular and pulmonary pharmacology as a postdoctoral fellow in the Department of Pharmacology at the University of Pennsylvania Medical School. He then moved to the pharmaceutical industry and held several positions which included responsibility for drug safety assessment, research and development, marketing, and legal, regulatory and scientific affairs. He served at Wyeth Laboratories, Eastman Pharmaceuticals/Sterling Drug, and later at Bristol-Myers Squibb where in 1990 he was named Director, Planning and Coordination in World Wide Regulatory Affairs. Dr. Bass has been a member of the Drug Information Association and the Regulatory Affairs Professional Society. He has also served on the Editorial Board for the *Drug Information Journal* and on the Board of Directors of the College of Graduate Studies Alumni Association.

Irving Cohen, Ph.D., (1973), accepted a postdoctoral position at New York University where he studied the biochemistry of mental disease and developed methods to quantitate enzyme activities in brain areas of animals and blood of humans. In 1975 he moved to I.C.I. Americas where he studied Pharmacokinetics/Pharmacodynamics Atenolol, H₂-Receptor Antagonists and Aldose Reductase Inhibitors. In 1988 he became Clinical Scientist at DuPont Merck Pharmaceutical Company in the Medical Products Department (Fig. 37). His research has been in cardiology, hypertension and anti-arrhythmic agents.

Bruce P. Greenberg, Ph.D., (1972), from 1971 until 1973 served as Assistant Professor of Clinical Pharmacology at the University of Cincinnati College of Medicine and as a Cardiovascular Pharmacologist at the May Institute in Cincinnati. In 1973 he became Clinical Research Associate at Lederle Laboratories. He subsequently moved to American Cyanamid Company where he served in several positions, including Man-

ager of International Drug Surveillance and Director of Scientific and Medical Services. He later accepted the position of Vice President of Clinical and Scientific Affairs at MEDED in Wilton, Connecticut. He also served as Visiting Clinical Associate Professor of Pharmacology/Toxicology at New York College of Osteopathic Medicine (Fig. 38). He has published 24 articles on his work.

Robert E. Mancini, Ph.D., D.O., (1973), went on to a D.O. degree from the Philadelphia College of Osteopathic Medicine in 1977. Following residency he was a Fellow in Clinical Pharmacology at Children's Hospital of Philadelphia. In 1980 he became Associate Professor and Chairman of Pharmacology, Toxicology and Experimental Therapeutics at New York College of Osteopathic Medicine, later advancing to Professor of Pharmacology and Toxicology (Fig. 39).

Dr. Mancini, a Fellow of the College of Physicians of Philadelphia, became a member of the National Board of Osteopathic Medical Examiners in 1983 and later served as its President. He has made over 200 educational presentations at meetings throughout the country and has authored 24 publications.

William M. Troetel, Ph.D., (1972), from 1971 to 1973 served as an instructor in pharmacology for Jefferson Medical College. In 1973 he became Division Director of Regulatory Affairs at USV/Revlon Health Care Group, later moving to the position of Senior Vice President at Oxford Research International Corporation. In this position he served as a regulatory consultant to American, European and Japanese health care companies. After a brief interval with Yamanouchi U.K. Limited, he returned to Oxford Research as Chief Executive Officer (Fig. 40). In

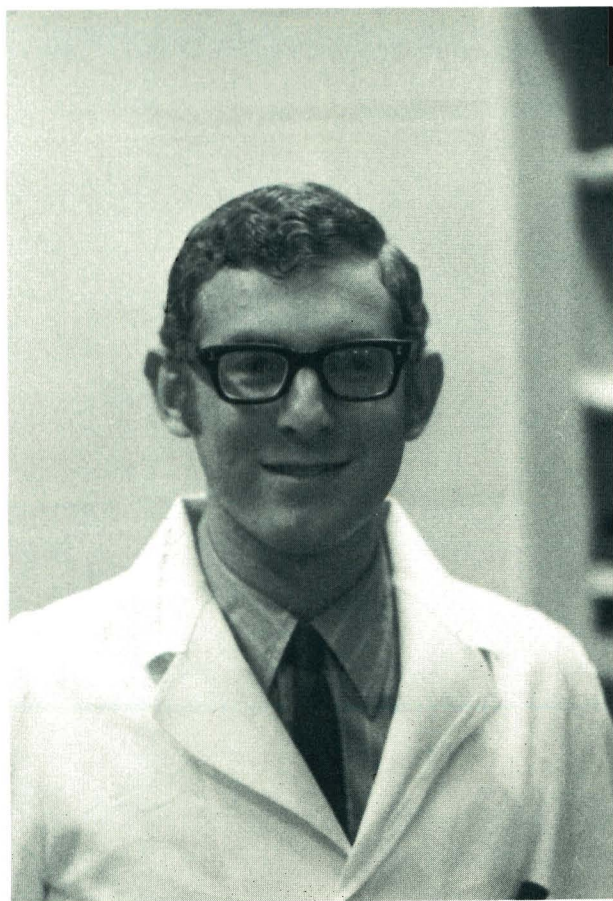


Fig. 37. Irving Cohen, Ph.D. Clinical Scientist at DuPont Merck Company.

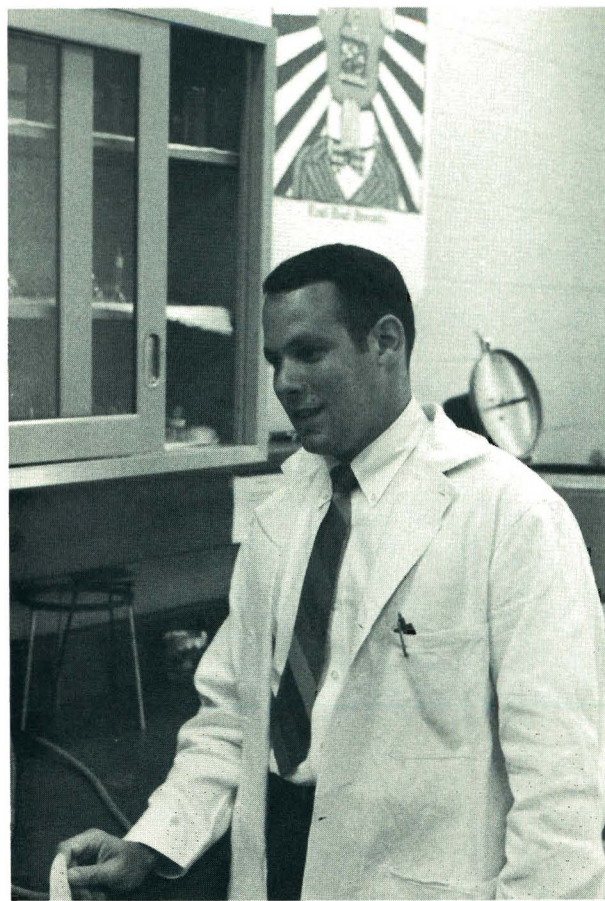


Fig. 38. Bruce P. Greenberg, Ph.D. research scientist in pharmacology/toxicology.

1989 he became Adjunct Assistant Professor at the Arnold and Marie Schwartz College of Pharmacy, Long Island University.

Physiology Alumni

William I. Forbes, III, M.D., Ph.D., (1972), received his M.D. from Jefferson in 1973. He served a general surgery residency at Abington Memorial Hospital in 1973 and then was a resident in otolaryngology at Jefferson under Dr. Lindsay Pratt until 1977. From 1978 to 1988 he was Chief of Maxillofacial Surgery at General Hospital of Saranac Lake in Saranac Lake, New York. He also served as Chief of Otolaryngology for the 1980 Winter Olympics held in Lake Placid,

New York. He has served as a consultant in otolaryngology to a number of hospitals and since 1988 he has held staff appointments in three New York hospitals.

Lewis F. McLean, Ph.D., (1974), became an Associate in clinical research at Merck Sharp & Dohme Research Laboratories where he monitored clinical drug trials. In 1981 he was promoted to Assistant Director of Clinical Neuroscience where he was involved in planning, protocol design, recruitment of investigators, and monitoring of clinical trial programs.

Preventive Medicine Alumni

Lawrence J. Mellon, M.S., M.D., (1972), had



Fig. 39. Robert E. Mancini, Ph.D., D.O., Professor and Chairman of Pharmacology and Toxicology, Assistant Dean for Clinical Sciences, New York College of Osteopathic Medicine.

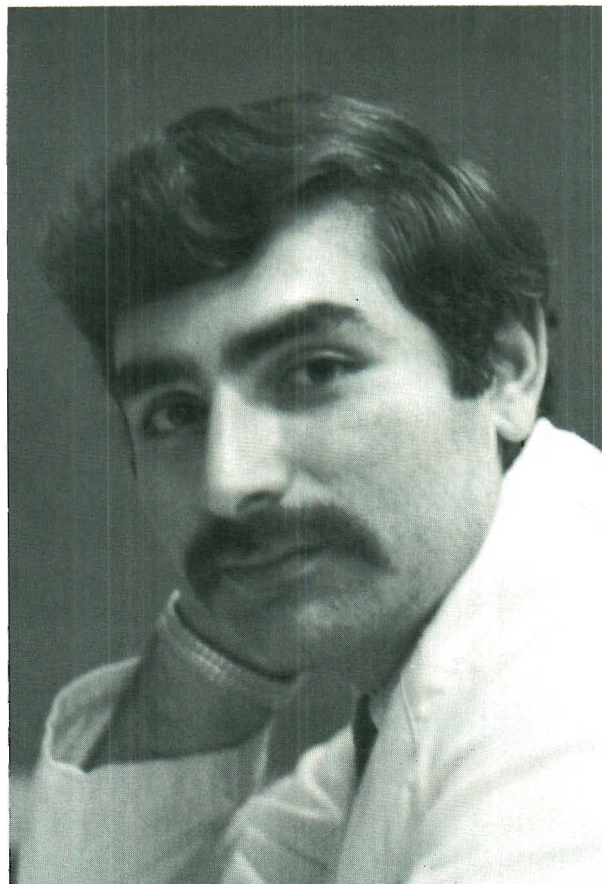


Fig. 40. William M. Troetel, Ph.D., Chief Executive Officer, Oxford Research International.

earned his M.D. degree in 1959 from Jefferson. From 1966 to 1978 he was Medical Director at Boeing Vertol Company in Philadelphia. He became certified by the American Board of Preventive Medicine in Occupational Medicine in 1975. In 1978 he was named Vice President of Health, Safety and Environmental Affairs at CertainTeed Corporation in Valley Forge. He is a Fellow of the American Academy of Occupational Medicine and Past President of the Industrial Medical Association of Philadelphia. He has also served as Adjunct Clinical Assistant Professor of Preventive Medicine at Jefferson Medical College.

Leah Z. Ziskin, M.S., M.D., (1973), had earned her M.D. degree from Temple School of Medicine in 1962. In 1966 she joined the United States Air Force as an Occupational Health Officer. In 1968 she became a public health physician for the Camden City Health Department and in 1974 Chief of the Communicable Disease Program for the New Jersey State Department of Health. She continued with the Department of Health in various capacities including Acting State Commissioner of Health and then Acting Deputy Commissioner. Dr. Ziskin served as Vice-Chairperson of the 1988 Task Force which reported on Adolescent Pregnancy in New Jersey and also served on the Governor's Council on the Prevention of Mental Retardation. Through her research, mostly

in the areas of preventive medicine and public health, she has authored 12 articles and made ten major addresses at national meetings.

Physics Alumni

Panayotis A. Assimakopoulos, Ph.D., (1971), was a research physicist with the Nuclear Research Centre Democritos in Athens, Greece, before coming to the United States to earn a master's degree in physics from Rutgers University. He served as a research fellow at the Bartol Research Foundation of the Franklin Institute while earning his Ph.D. at Jefferson. He then returned to Greece to serve as Senior Research Physicist at the NRC Democritos until 1977. During that time he also served as Adjunct Assistant Professor of Physics at the Chair of Nuclear Physics at the University of Ioannina, Greece. In 1977 he was named Professor of Physics. In 1983 he was promoted to Chairman of the Department of Physics, and in 1989 Director of the Division of Atomic, Molecular, Nuclear and High Energy Physics at the University. In 1984 he took a sabbatical and served as Visiting Professor of Physics in the Department of Radiology at the University of California at San Francisco School of Medicine. He has written eight books and more than 39 publications in the areas of physics and chemistry, electromagnetic measurements, nuclear physics and NMR imaging.

ALUMNI

1970	Bass, Steven W., Ph.D., Pharmacology Callahan, Hugh J., Ph.D., Biochemistry Conklin, Richard H., Ph.D., Pathology Fried, Dennis A., M.S., Anatomy Grosso, Louis S., Ph.D., Pharmacology Hospador, Michael A., Ph.D., Pharmacology Lee, Eun Woo, Ph.D., Pharmacology McGarrity, Gerard J., Ph.D., Microbiology Rubin, Benjamin D., M.S., Anatomy Saito, Fumike U., Ph.D., Pharmacology Summers, Alan L., Ph.D., Physiology Weinberg, Martin, Ph.D., Physiology	Haeffner-Gormley, Lorraine, Ph.D., Biochemistry Hefton, John M., Ph.D., Anatomy Lin, Yu Chen, Ph.D., Biochemistry Smyth, Robert D., Ph.D., Biochemistry Weislow, Owen S., Ph.D., Microbiology
1971	Assimakopoulos, Panayotis A., Ph.D., Physiology Forbes, Barbara F., Ph.D., Anatomy Freedburg, Paul S., M.S., Physics Gonasun, Leonard M., Ph.D., Pharmacology	1972 Abaidoo, Kodwo J., Ph.D., Physiology Belej, Mirosław A., Ph.D., Pharmacology Castingnano, Dominic E., Ph.D., Physiology Forbes, William I., III, Ph.D., Physiology Fouts, David W., M.S., Preventive Medicine Greenberg, Bruce P., Ph.D., Pharmacology Hoffman, Stanley A., M.S., Physiology Hollshwandner, Caroline H., Ph.D., Physiology Koepke, Uwe C., Ph.D., Pharmacology Luscombe, Susan, M.S., Microbiology

- Mellon, Lawrence J., M.S., Preventive Medicine
- Much, David H., Ph.D., Microbiology
- Orcutt, Roger P., Ph.D., Microbiology
- Phelan, Thomas I., M.S., Anatomy
- Schlesinger, Harvey R., Ph.D., Microbiology
- Scott, Carolyn M., M.S., Anatomy
- Troetel, William M., Ph.D., Pharmacology
- Van Tuyle, Glenn, Ph.D. Biochemistry
- Wa Kimani, Steven N., Ph.D., Physiology
- Whitenack, Stephen H., Ph.D., Anatomy
- 1973 Borgelt, Bruce E., Ph.D., Pathology
- Brownstein, Stanley S., M.S., Preventive Medicine
- Buchbinder, Dale, M.S., Anatomy
- Cohen, Irving, Ph.D., Pharmacology
- Dickman, Michael D., Ph.D., Microbiology
- Franklin, Samuel G., Ph.D., Biochemistry
- Goody, Howard E., Ph.D., Pathology
- Lahita, Robert G., Ph.D., Microbiology
- Lang, Armand F., Ph.D., Biochemistry
- Malish, Steven L., Ph.D., Pharmacology
- Mancini, Robert E., Ph.D., Pharmacology
- Martin, John S., Ph.D., Physiology
- Papageorgopoulos, Christos A., Ph.D., Physics
- Scott, Samuel D., Ph.D., Physiology
- Wessell, Rosalie W., Ph.D., Physiology
- Wighton, Robert, Ph.D., Physiology
- Ziskin, Leah Z., M.S., Preventive Medicine
- 1974 Adolphe, Allen B., Ph.D., Pharmacology
- Blank, Frederick C., M.S., Clinical Microbiology
- Bower, John R., Ph.D., Physics
- Buescher, Georganne K., M.S., Clinical Microbiology
- Cohn, Richard D., Ph.D., Pharmacology
- D'Agostino, Maria A., Ph.D., Biochemistry
- Dombkoski, Frank P., Ph.D., Physiology
- Elkins, Marsha E., M.S., Clinical Microbiology
- Erickson, Lance, M.S., Clinical Microbiology
- Feik, Diane Blechman, M.S., Clinical Microbiology
- Gadarowski, John J., Ph.D., Physiology
- Greene, Charlotte H., Ph.D., Physiology
- Grego, Nicholas J., Ph.D., Physiology
- Hami, Dvora, Ph.D., Physiology
- Kobrin, Lowell, Ph.D., Anatomy
- Mackowiak, Elaine D., Ph.D., Pharmacology
- McLean, Lewis F., Ph.D., Physiology
- Murphy, Christine V., M.S., Clinical Microbiology
- Noble, Clifford, J., Ph.D., Physics
- Ohashi, David K., M.S., Clinical Microbiology
- Papanicolaou, Basil G., M.S., Physics
- Poupard, James A., M.S., Clinical Microbiology
- Rocco, Loretta, M.S., Clinical Microbiology
- Rowan, Regina, M.S., Clinical Microbiology
- Salventi, John F., Ph.D., Microbiology
- Schebalin, Margarete, Ph.D., Physiology
- Stipceovich, Jane E., M.S., Clinical Microbiology
- Wade, Thomas J., Ph.D., Microbiology
- Weber, Paul R., Ph.D., Pharmacology
- West, Norman R., Ph.D., Pharmacology



Speakers at 1990 Career Opportunities Symposium: (left to right) Martin L. Ogletree, Physiology, '78; Gloria G. Post, Pharmacology, '83; Elise A. Triano, Pharmacology, '83; and Arlene A. McLean, Physiology, '76.

After 23 years as Chairman of the Department of Pharmacology, Dr. Coon retired in 1976 and was named Professor Emeritus. The new Chairman, effective July 1, 1976 was Carmine Paul Bianchi, Ph.D. (Fig. 41). Toxicology continued as an important part of the research program, although under Dr. Bianchi's direction, the major emphasis in research became redirected toward the general areas of cell pharmacology and neuropharmacology.

Two of the Department of Physiology's support facilities were added during this period, an electronic laboratory for design and maintenance and a photographic laboratory for assistance in presentations and publications. Active recruitment resulted in the appointments of Drs. Marlys H. Gee and Anatole Besarab as assistant professors. During 1976/77, another major departmental support facility was developed, an electron microscopy suite. Further recruitment resulted in the 1976 appointments of Drs. Thomas M. Butler, John T. Flynn and Joseph R. Sherwin. In 1977, Paul S. Blum, Ph.D., was named Assis-



Fig. 41. Carmine P. Bianchi, Ph.D., Chairman of Pharmacology (1976-86).

tant Professor. A growing research interest developed with emphasis on metabolic, hemodynamic, and pathophysiological aspects of myocardial ischemia and circulatory shock. The main focus of such activities was within the Department of Physiology, with significant additional interest in the Departments of Pharmacology, Medicine and Surgery. Collaborative research projects developed, and out of this interaction the Ischemia-Shock Research Center was established in 1977.

Among the new faculty members in the Department of Anatomy at the time were Drs. Devendra J. Kochhar and Kenneth P. Chepenik, developmental biologists who were trained in anatomy departments and were competitive at the National Institutes of Health for extramural funding. Both later rose to the rank of full Professor. Drs. Richard R. Schmidt and Robert M. Greene were also recruited at this time. Both were gross anatomists with potential for significant additional development. Dr. Greene went on to obtain a Research Career Development Award, a highly useful avenue for enhancing the growth of young faculty.

Dr. Charles Panos was appointed Professor of Microbiology in 1975. His experience in research and teaching in the area of microbial pathogenesis was needed to expand the Department's work in this area. Dr. Donald Lee Jungkind replaced Dr. Randall as Director of the Clinical Microbiology Laboratory. Dr. Clark also left Jefferson in 1977 and Catherine E. Calkins, Ph.D. was appointed to maintain the program in immunology. In 1978 Dr. Thomas MacDonald was appointed to complement Dr. Calkin's immunology program.

Anatomy Alumni

Vincent T. Armenti, M.D., Ph.D., (1979), earned his M.D. degree at Jefferson. He completed residency and fellowship training at St. Vincent's Hospital and Medical Center of New York after which he served as a Clinical Instruc-

tor in General Surgery at New York University and New York Medical College. In 1988 he returned to Jefferson as a clinical transplant fellow in renal and hepatic transplantation and Instructor in Surgery. He was then named attending surgeon on the University Surgical Service and Trauma Division. His clinical responsibilities included co-directorship of the Nutrition Support Service. He was also designated principal investigator on the National Database for Pregnancy Outcome in Transplant Recipients, which is funded by Sandoz Pharmaceuticals. Through his research, he co-authored and published six articles, nine abstracts and three book chapters.

Mildred Stoehr Christian, Ph.D., (1979), from 1967 to 1979 held various positions at McNeil Laboratories including Research Associate in Psychopharmacology, Pathology/Toxicology, Senior Scientist in Reproductive Pathology, and Group Leader in General Toxicology. In 1979 she joined Argus Research as Director of Research and was promoted to President in 1981, then named President of Argus International in 1982 (Fig. 42). She was responsible for supervision and conduct of activities performed by the company as consultants in reproductive, develop-



Fig. 42. Mildred S. Christian, Ph.D., President of Argus International.

mental and general toxicology and in quality assurance procedures to private corporations and governmental regulatory agencies. She was also named a Faculty Member of the INTOX Division Faculty in the Interdisciplinary Toxicology Graduate Program at the University of Arkansas. She has co-authored 33 papers and 41 abstracts in her field. In 1988 Dr. Christian was elected to the College of Graduate Studies Alumni Association Board of Directors and served as its Secretary.

Norman Rosenblum, Ph.D., M.D., (1975), earned his M.D. degree at Jefferson. Following residency and a fellowship in gynecologic oncology at the Hospital of the University of Pennsylvania he advanced to attending physician in 1985. He served as Clinical Assistant Professor of Obstetrics and Gynecology at the Medical College of Pennsylvania and also held appointments at Jefferson and at Temple University School of Medicine. He has been an attending physician at Lankenau Hospital and on staff at Fox Chase Cancer Center and Jeanes Hospital. A fellow of the American College of Obstetricians and Gynecologists, Dr. Rosenblum has authored 16 publications and made over 30 invited lectures in the area of gynecologic oncology.

Biochemistry Alumni

Lewis J. Klunk, Ph.D., (1976), received the Department's Paul Pinchuck Award for Outstanding Student in Biochemistry. While working toward his degree, he served as Senior Biochemist in the Biochemical Pharmacology Group at William H. Rorer, Inc. In 1976 he became Section Head in the Metabolism and Methods Development Section of the Drug Disposition Department of Revlon Health Care Research in Tuckahoe, New York. He was responsible for all aspects of pre-clinical and certain clinical drug metabolism studies carried out on novel drug molecules during their discovery and development. In 1986 Dr. Klunk moved on to Bristol-Myers Squibb Company where he served as Associate Director of Metabolism and Pharmacokinetics until 1990 when he was promoted to Director. He has co-authored 39 publications and presentations of his work.

Microbiology Alumni

Kathleen Meehan Arias, M.S., (1979), was supervisor of the microbiology laboratory at

Frankford Hospital in Philadelphia until 1980 and then was named infection control coordinator. In 1990 she became hospital epidemiologist at Hahnemann University. She received certification as a Specialist in Public Health and Medical Laboratory Microbiology from the American Academy of Microbiology in 1981 and in Infection Control from the Certification Board of Infection Control in 1984. She testified before the Pennsylvania Environmental Quality Board on the proposed Pennsylvania Infectious and Chemotherapeutic Waste Regulations and before the Occupational Safety and Health Administration on its proposed regulations on prevention of transmission of bloodborne pathogens in the workplace. As a member of the faculty at the Pennsylvania State University, she has taught infectious disease concepts to educators whose backgrounds may not be in the healthcare field. An active member of Jefferson's Clinical Microbiology Alumni Group, Mrs. Arias is also active in the American Society for Microbiology and the Association for Practitioners in Infection Control.

Walter P. Carney, Ph.D., (1978), completed a postdoctoral Research Fellowship at Massachusetts General Hospital, Harvard Medical School in 1982 and became Principal Scientist at New England Nuclear/E.I. DuPont. He was promoted to Supervisor of Oncogene Research in 1983 and then Research Associate/Supervisor of the Oncogene Research Program in 1987. He was also named Assistant Clinical Professor in the Department of Pathology at Tufts New England Medical Center in Boston in 1985. As part of a joint venture, Dr. Carney was responsible for the discovery and development of the Neu Oncogene ELISA, an immunoassay, to be utilized in evaluating human breast tissue and blood samples for the detection and quantitation of the Neu Oncogene protein. He has published 45 papers and 85 abstracts of his work.

Eugene V. Genovesi, Ph.D., (1979), was an NIH Postdoctoral Trainee in Viral Oncology in the Tumor Virus Laboratory at Duke University Medical Center and later became a Research Associate there. In 1981 he became a Resident Research Associate of the National Research Council at the U.S. Army Medical Research Institute of Infectious Diseases. He then went on to

serve in various capacities at the Plum Island Animal Disease Center, including Research Microbiologist and Acting Chief of the Microbiology Laboratory. He has published 29 papers and 28 abstracts of his work. His research has involved the immunobiology and pathogenesis of host/ -virus, -tumor, and -microbial diseases, and the immunobiologic regulation of virus-encoded and cellular-encoded functions.

Thomas J. Harkins, M.S., (1979), has been employed at Southeast Regional Medical Center in Petersburg, Virginia as Chief Technologist in Microbiology. In his work, he developed a screening test for *Yersinia* on CIN agar.

Michael H. Levy, M.D., Ph.D., (1976), was trained in the combined M.D./Ph.D. program. During his third year he became involved with *Ars Morendi*, a group of health care professionals concerned with the needs and care of the dying. His interest in terminal care continued throughout his training and led to his position as a medical oncologist at Fox Chase Cancer Center (Fig. 43). He formed and directed the Center's Palliative Care Service, an inpatient consultation and home-care hospice program and was also medical director of home health services. He has served on the Board of Directors of the National Hospice Organization.

Valerie Mowrer Linter, M.S., (1978), was employed until 1981 as a clinical microbiologist at J.C. Blair Memorial Hospital. In 1981 she accepted a position as Veterinary Clinical Microbiologist at the Pennsylvania State University where she worked until 1988 when she became Adjunct Instructor in Biology at Juniata College in Huntingdon, Pennsylvania.

Barbara Sawyer Lowry, M.D., M.S., M.P.H., (1977), had previously earned her M.D. at Temple Medical School and, after Jefferson, went on to earn an M.P.H. degree at Johns Hopkins University School of Hygiene and Public Health. A Lieutenant Colonel in the United States Army Medical Corps, she worked as a Research Scientist at the U.S. Army Medical Research Institute of Infectious Diseases in the Bacteriology Division and served as its Assistant Chief from 1980 to 1985. She was a Visiting Assistant Professor of Pathology at the Medical College of Pennsylvania from 1968 to 1978 and an Instructor

in Pathology at Jefferson Medical College from 1974 to 1978. She became a Consultant in Hospital Epidemiology with expertise in Infection Control, Pathology, Clinical Microbiology, Elder care and Clinical Trials.

Jeri L. deTurck May, M.S., (1979), became a Microbiologist at Wyeth Laboratories and was promoted to Supervisor of the Microbiology Monitoring Group in Quality Assurance in 1980. In 1984 she took a position with ICI Pharmaceuticals, a division of ICI Americas, as Developmental Microbiologist in the Methods Development Services Group where she was promoted to Group Leader in 1986.

Elcinda McCrone, M.S., M.D., (1977), went on to her M.D. from Jefferson in 1983. From 1977 to 1979 she was Division Head of Microbiology at Allentown Hospital in Allentown, Pennsylvania. She was a resident in Medicine at Boston City Hospital and then served as a Clinical Fellow in the Infectious Disease Departments of Beth

Israel Hospital, Brigham & Women's Hospital and Dana Farber Cancer Institute in Boston. From 1987 to 1989 she was a Research Fellow in Infectious Diseases at Beth Israel Hospital. Since 1989 she has been Assistant Professor of Medicine at Boston University School of Medicine, Staff Physician and Director of the Infection Control Unit at Boston University Hospital, and Staff Physician in the Department of Medicine at Boston City Hospital. In her positions, Dr. McCrone has been involved in several clinical drug trials.

Karin L. McGowan, M.S., (1977), **Ph.D.**, received her degree in clinical microbiology at Jefferson and went on to earn a Ph.D. in Microbiology and Immunology at Temple University in 1984. From 1984 to 1986 she served as Assistant Professor in the Department of Pediatrics at Temple Medical School and Director of the Microbiology Laboratory at St. Christopher's Hospital for Children in Philadelphia. In 1986 she was appointed Assistant Professor in the Depart-

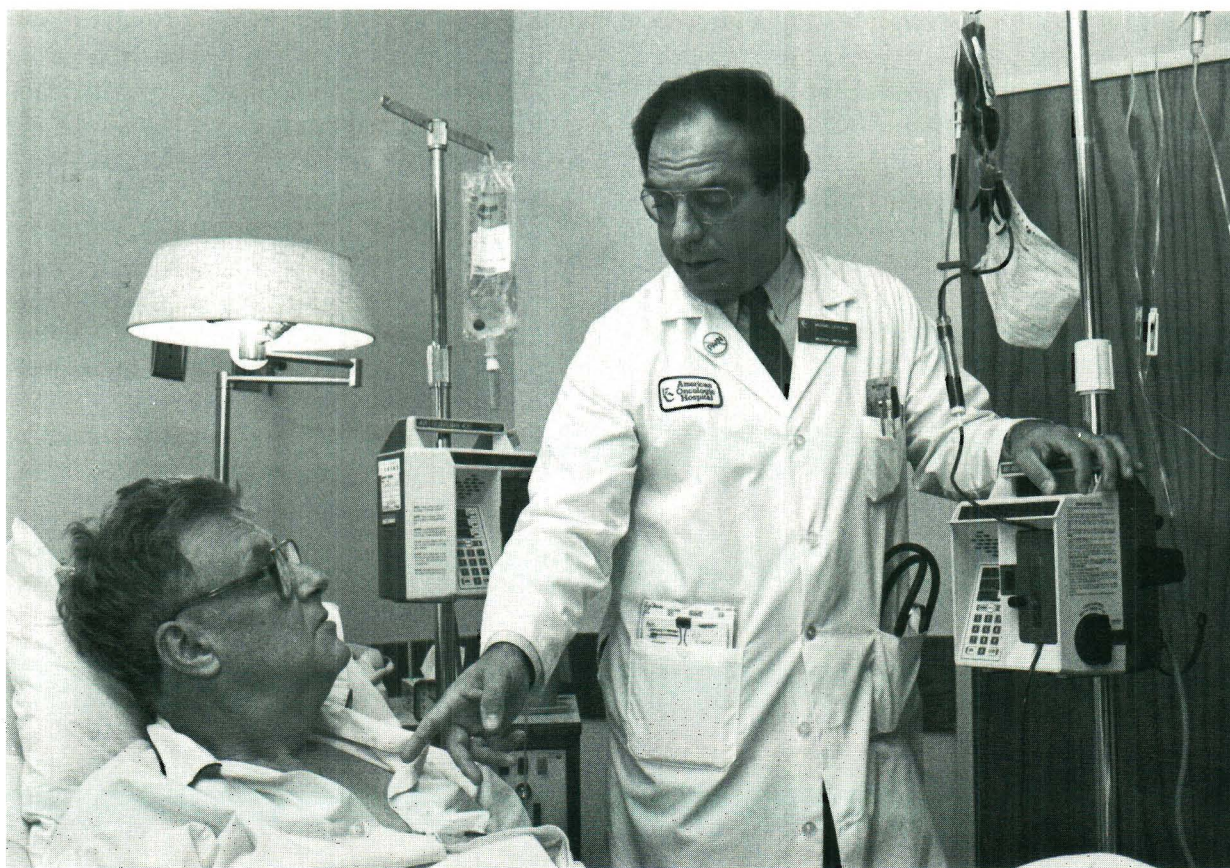


Fig. 43. Michael H. Levy, M.D., Ph.D., medical oncologist, Fox Chase Cancer Center, and Board Member, National Hospice Organization.

ment of Pediatrics at the University of Pennsylvania School of Medicine and Director of the Microbiology Laboratory at Children's Hospital of Philadelphia. Since 1988 Dr. McGowan has also served as a consultant in laboratory medicine at the American Research Hospital for Children in Krakow, Poland, through PROJECT HOPE. She has published 13 papers and 11 abstracts on her work in infectious diseases.

Gail Schwarz, M.S., (1979), Ph.D., worked as the Supervisor of Microbiology at Frankford Hospital until 1984 when she was named Director of Infection Control at Our Lady of Lourdes Hospital in Camden, New Jersey. She earned her Ph.D. degree from the University of Pennsylvania in the area of Science Education/Infection Control in 1986. She became the Program Director at Medisys, Incorporated, an infection control consulting firm, and then in 1989 the Administrative Director of Infection Control at Cooper Hospital in Camden. In 1990 she was named Chairperson of the Camden County Rabies Task Force for the State of New Jersey Department of Health. Also in that year she was named a part-time faculty member in Jefferson's master of science program in microbiology where she presents the course in Epidemiology and Infection Control. An active member of Jefferson's Clinical Microbiology Alumni Group, she served as its president in 1981-1983.

Ostein Barnes Truitt, M.S., (1975), worked as a medical technologist at Lankenau Hospital until 1976 and then became Education Coordinator/Instructor of Medical Laboratory at Marymount College of Virginia. In 1980 she was appointed instructor of clinical microbiology in the medical technology program at the University of Maryland. In 1989 she went on to Assistant Professor in the medical laboratory technology program at Montgomery College in Takoma Park, Maryland.

Linda P. Villazon, M.S., (1978), enrolled in the Ed.D. degree program in Education Administration at Temple University. She served as Program Director of Medical Laboratory Technology at Gwynedd-Mercy College until 1985 and then as Educational Coordinator of the Allied Health Division of Manor Junior College until 1986. She was an instructor of science at Montgomery County Community College in 1989-1990 and then

returned to Gwynedd-Mercy to serve as Chairperson of the Allied Health Division.

Kent J. Weinhold, M.S., Ph.D., (1979), had previously earned his master's degree in clinical microbiology from Jefferson in 1974. He served as a postdoctoral research associate in the laboratory of Dr. E.F. Wheelock at Jefferson and then went to Duke University Medical Center for continued postdoctoral training in the Division of Immunology. He remained at Duke, holding the positions of Associate in the Department of Surgery until 1982 and Assistant Medical Research Professor until 1989. He was named Project Leader of Pre-Clinical Studies on Prevention and Intervention in AIDS and Chief Retrovirologist in Duke's National Cooperative Drug Discovery Group in 1986. In 1987 he became Chief Cellular Immunologist and Chief Retrovirologist in the AIDS Treatment Evaluation Unit there and in 1989 he was named Associate Professor of Experimental Surgery at Duke University Medical Center and Director of the Cellular Immunology Program at the Duke Center for AIDS Research (Fig. 44). He was also named Co-Chairman of the Immune Based Therapies Committee of the AIDS Clinical Trial Group, Vice-Chairman of the Immunology Core Committee of the AIDS Clinical Trials Group and Chief Cellular Immunolo-



Fig. 44. Kent J. Weinhold, Ph.D., Associate Professor of Experimental Surgery and Director of Cellular Immunology Program, Duke University.

gist of the AIDS Vaccine Evaluation Group at NIAID/NIH. Dr. Weinhold has co-authored 83 publications in his areas of expertise—human retrovirology, human cellular immunology and immunotherapy.

Pharmacology Alumni

Wade H. Berrettini, M.D., Ph.D., (1979), had earned his M.D. from Jefferson Medical College in 1977. Following residency in the Department of Psychiatry and Human Behavior at Jefferson he was appointed Clinical Associate in the Biological Psychiatry Branch of the National Institutes of Mental Health. In 1982, Dr. Berrettini became Senior Surgeon/Senior Clinical Associate at the United States Public Health Service Clinical Neurogenetics Branch of the NIMH and also Adjunct Assistant Professor of Psychiatry and Human Behavior and Pharmacology at Jefferson Medical College. In addition to these positions, in 1986 he became Chief of the Outpatient Clinic in the Division of Intramural Research Programs at NIMH. His research is in the area of molecular genetics of manic-depressive illness and schizophrenia and cerebrospinal fluid studies of neuropsychiatric diseases. He has published 79 papers in his field (Fig. 66).

Eric Glasofer, Ph.D., (1975), following graduation earned an M.D. degree at Jefferson in 1978. He completed a residency in pediatrics in 1981 and then a fellowship in allergy and clinical immunology in 1983 at Jefferson. He received NIH funding for three years to study the disposition of theophylline in asthmatic children and later was in the private practice of allergy and clinical immunology (Fig. 45).

Richard D. Pinder, Ph.D., (1978), worked as a forensic toxicologist in the Office of the Medical Examiner of Philadelphia from 1973 to 1978. In 1979 he became Director of the Toxicology Laboratory in the Office of the Chief Medical Examiner for the State of Connecticut. In 1988 he was also named Forensic Laboratory Inspector for the National Laboratory Certification Program of the National Institute on Drug Abuse and in 1989 he was also named Clinical Instructor in the Department of Laboratory Medicine at the University of Connecticut Health Center.

Walter C. Prozialeck, Ph.D., (1978), com-

pleted his postdoctoral work in the Departments of Pharmacology and Anatomy at the Medical College of Pennsylvania. In 1980 he became Assistant Professor of Pharmacology at the Philadelphia College of Osteopathic Medicine where he advanced to Professor in 1989 (Fig. 46). In 1986 he was also appointed Adjunct Associate Professor of Pharmacology at the Medical College of Pennsylvania. He received the Christian R. and Mary F. Lindback Foundation Award for Distinguished Teaching in 1989. His research has been in toxicology and biochemical pharmacology. He has published 37 articles.

Sidney H. Schnoll, Ph.D., (1976), progressed to Professor of Internal Medicine and Psychiatry at the Medical College of Virginia/Virginia Commonwealth University.

Richard L. Steelman, Ph.D., (1977), held numerous positions beginning in 1954 at Smith Kline and French Laboratories as a junior phar-

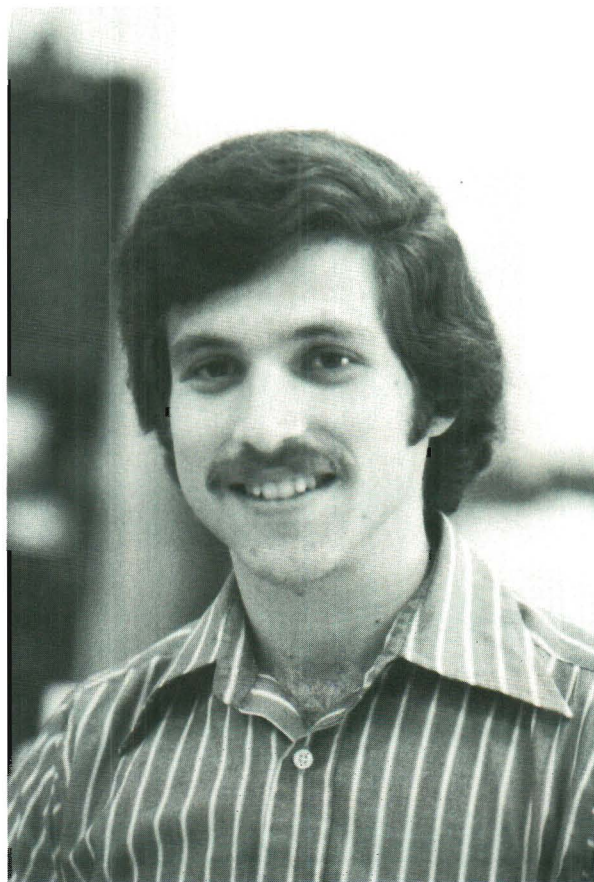


Fig. 45. Eric Glasofer, Ph.D., M.D. Professor of Pharmacology at College of Osteopathic Medicine in Chicago.

macologist and worked up to Group Leader of Toxicology. He joined McNeil Pharmaceutical in 1968 as Head-Toxicology Section, was appointed Acting Director of Pathology/Toxicology in 1969 and Director of Drug Safety Evaluation until 1988. From 1988 to 1990 he was Group Director of Drug Safety Evaluation for RWJ Pharmaceutical Research Institute. In 1990 he became President of Concord Consultants, Inc. Dr. Steelman is a Diplomate of the American Board of Toxicology and has served on the Board of Governors of the American College of Toxicology. He joined the Board of Directors of the College of Graduate Studies Alumni Association in 1988 and became its president in 1990.

Physiology Alumni

Michael S. Blank, Ph.D., (1976), accepted a postdoctoral position in physiology and endocrinology at the University of Manitoba Faculty



Fig. 46. Walter C. Prozialeck, Ph.D., Professor of Pharmacology, Philadelphia College of Osteopathic Medicine.

of Medicine in Winnipeg. In 1978 he moved on to Yerkes Regional Primate Research Center at Emory University as Assistant Research Professor and Chief of the Radioimmunoassay Laboratory and, later, Associate Research Professor. He also became Assistant Professor of Anatomy and Cell Biology at Emory School of Medicine. He received a one year sabbatical in 1983 and served as an Expert in the Section on Molecular Endocrinology, Endocrinology and Reproduction Research for the National Institute of Child Health & Human Development at the National Institutes of Health. In 1985, Dr. Blank moved on to Hazleton Biotechnologies Company as a Senior Staff Scientist and Senior Project Administrator and later Laboratory Director. In 1988 he was named Principal Scientist and Group Leader at R.W. Johnson Pharmaceutical Research Institute. His work involves the oversight of eight scientists involved in analytical method development and implementation for support of pharmacokinetic trials of organic protein therapeutic agents. As a result of his work, he has published 35 papers in his field (Fig. 47).

James E. Foley, Jr., Ph.D., (1976), completed his postdoctoral work at Tulane University School of Medicine where he studied renal pharmacology, hematopharmacology and erythropoietin. In 1977 he joined the Squibb Institute for Medical Research where his field was cardiovascular pharmacology. In April of 1989 he moved to the Squibb Corporation where he assumed the position of Director, Scientific Liaison—Japan. In October of that year he was named Director of Worldwide Licensing for Bristol-Myers Squibb Company. His office, located in Tokyo, is involved in licensing and strategic research alliances.

Patricia A. Gwartz, Ph.D., (1978), accepted a postdoctoral position in cardiovascular physiology at the University of Oklahoma where she was named instructor of physiology in 1980. She then served for one year as a Research Assistant Professor at the Dalton Research Center and Department of Physiology at the University of Missouri. In 1982 she was named Assistant Professor in the Department of Physiology at Texas College of Osteopathic Medicine where she was promoted to Associate Professor in 1988. She has served as a reviewer for such journals as the

American Journal of Physiology, Circulation Research and *Journal of Applied Physiology*. She has also served as a grant reviewer for the Texas Affiliate of the American Heart Association, the Veterans Administration and the NIH Respiratory and Applied Physiology Study Section. Through her research, emphasizing sympathetic neural control of myocardial contractile function and coronary blood flow, she has published 31 papers and 53 abstracts.

Arlene Andrews McLean, Ph.D., (1976), began her career in 1962 at Wyeth Laboratories as a Research Assistant. In 1966 she became Junior Statistician at Merck Sharp & Dohme Research

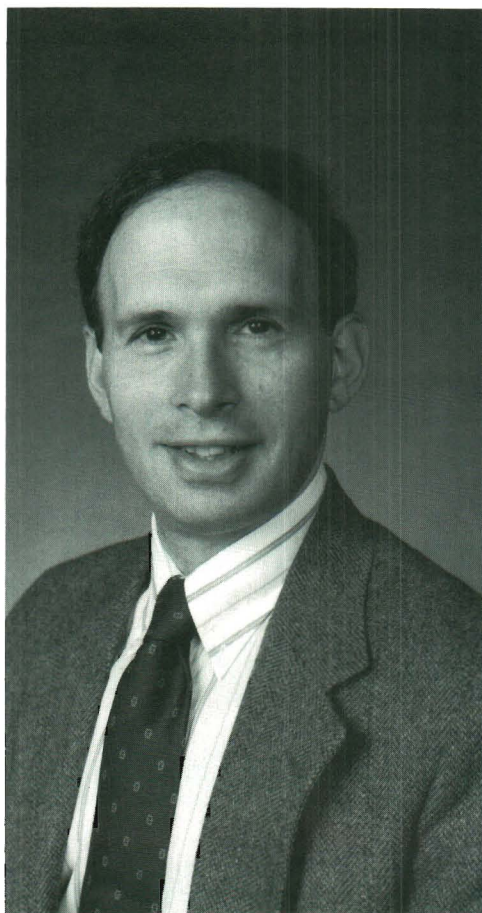


Fig. 47. Michael S. Blank, Ph.D., research pharmaceutical scientist.

Laboratories and worked her way through numerous positions in Analytic Virus and Cell Biology Research to Senior Director of Special Projects. In 1986 she moved on to Centocor, Inc. in Malvern, Pennsylvania as Director of Biomedical Operations in the Research and Development Division. In 1987 she was advanced to Director of U.S. Regulatory Affairs and in 1988 was named Vice President. She has co-authored 60 publications.

Diane Reibel-Shinfeld, Ph.D., (1978), received postdoctoral training in the department of physiology at the Milton S. Hershey Medical Center in Hershey, Pennsylvania and at Temple University School of Medicine in the Department of Medicine, Cardiology Section. In 1981 she returned to Jefferson as a Research Associate in the Department of Physiology, where she was named Assistant Professor in 1982 and Research Associate Professor in 1988. She was the recipient of the NIH Individual National Research Award and an American Heart Association Fellowship in 1981 for her work in lipid metabolism in cardiac hypertrophy and failure. Dr. Reibel-Shinfeld has authored 26 papers and 32 abstracts.

Kenneth P. Sunnergren, M.D., Ph.D., (1979), subsequently earned his M.D. degree at Jefferson in 1983. He completed a residency at the Medical College of Virginia in 1986 and then went to the University of Texas Southwestern Medical Center in Dallas to serve as the Bugher Fellow in Molecular Cardiology. In 1990 he was named Assistant Professor of Medicine at Cooper Hospital/University Medical Center in Camden, New Jersey.

George J. Trachte, Ph.D., (1979), became Associate Professor of Pharmacology at the University of Minnesota-Duluth (Fig. 48). His work involved study of two hormones—angiotensin and thromboxane—to try to determine how they affect nerve activity. He has published over 40 articles. Dr. Trachte has also received Honorable Mention for the Basic Science Teacher of the Year at UMD School of Medicine.

1975 Dobelbower, Ralph, Ph.D., Physiology
 Fernandes, Prabhavathi B., Ph.D.,
 Microbiology
 Fugo, Richard J., Ph.D., Physiology
 Gilson, Barbara E., Ph.D., Anatomy
 Glasofer, Eric D., Ph.D., Pharmacology
 Glaudel, Ursula A., M.S., Clinical
 Microbiology
 Koplovitz, Irwin, Ph.D., Physiology
 Lewis, Sandra, M.S., Pharmacology
 Lewis, Thomas L., Ph.D., Anatomy
 Neilsen, Erling W., Ph.D., Physics
 Rosenblum, Norman Ph.D., Anatomy
 Schlesinger, Diana M., Ph.D., Anatomy
 Sternberg, Arie, Ph.D., Physiology
 Temcharoen, Prasong, M.S., Microbiology
 Truitt, Osteen, M.S., Clinical Microbiology
 Wentzel, H. Earl, M.S., Preventive
 Medicine

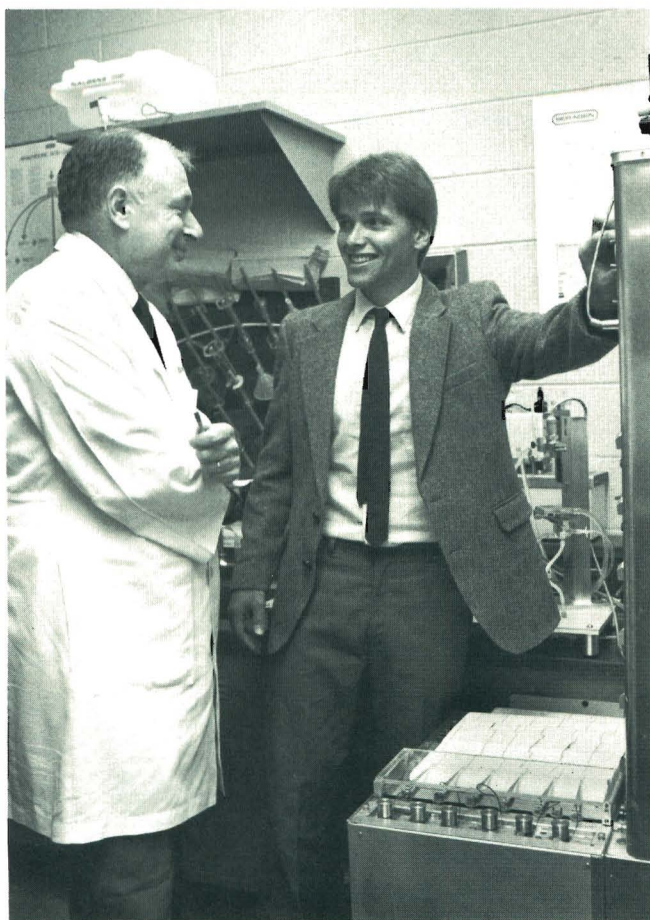


Fig. 48. George J. Trachte, Ph.D., Associate Professor of Pharmacology, University of Minnesota-Duluth with Dr. Allan M. Lefer (left).

1976 Andrews, Larry S., Ph.D., Pharmacology
 Axman, Dennis J., M.S., Clinical
 Microbiology
 Bergquist, Joanne R., M.S., Clinical
 Microbiology
 Blank, Michael S., Ph.D., Physiology
 Bridenbaugh, G. Alan, Ph.D., Physiology
 Buch, Judith E., M.S., Clinical Microbiology
 Foley, James E., Jr., Ph.D., Physiology
 George, Wendy S., M.S., Clinical
 Microbiology
 Hassan, Joseph R., Ph.D., Physiology
 Hoops, Carol V., Ph.D., Anatomy
 Klunk, Lewis K., Jr., Ph.D., Biochemistry
 Lai, Chang-Hai, Ph.D., Biochemistry
 Levy, Michael H., Ph.D., Microbiology
 Lim, Vincente N., M.S., Clinical
 Microbiology
 McLean, Arlene A., Ph.D., Physiology
 Parrish, Christine M., M.S., Clinical
 Microbiology
 Pottgen, Paul A., Ph.D., Pathology
 Rosenberg Silverman, Bonita S., M.S.,
 Clinical Microbiology

1977 Becker, Roger J., Ph.D., Physics
 Bills, Thomas K., Ph.D., Pharmacology
 Blume, Wendy M., M.S., Clinical
 Microbiology
 Carlson, Richard P., Ph.D., Physiology
 Cole, Mercedes T., M.S., Clinical
 Microbiology
 DeMesquita, Susan, Ph.D., Physiology
 East, James M., Ph.D., Anatomy
 Faricelli, Jack A., M.S., Clinical
 Microbiology
 Fow, Mark I., Ph.D., Pharmacology
 Hall, Reginald, Ph.D., Pharmacology
 Irwin, Maureen Hiser, M.S., Clinical
 Microbiology
 Jenckes, George A., III, M.S., Clinical
 Microbiology
 Lowry, Barbara Sawyer, M.S., Clinical
 Microbiology
 McCrone, Elcinda L., M.S., Clinical
 Microbiology
 McGowan Karin L., M.S., Clinical
 Microbiology
 Paul, Stephen M., Ph.D., Biochemistry
 Rosco, Diane L., M.S., Clinical
 Microbiology
 Rosen, Arye, M.S., Physiology
 Rudolph, Paul G., Ph.D., Physics

- Schnoll, Sidney, H., Ph.D., Pharmacology
 Shearman, Clyde W., Ph.D., Biochemistry
 Sheretta, Annemarie D., M.S., Clinical Microbiology
 Steelman, Richard L., Ph.D., Pharmacology
 Weeks, Susan A., M.S., Clinical Microbiology
 Wilson, Maria Theodos, M.S., Clinical Microbiology
 Young, Janice, M.S., Clinical Microbiology
 Zdetsis, Aristides D., Ph.D., Physiology
- 1978 Balla, Pearl E., M.S., Clinical Microbiology
 Bondi, James M., M.S., Clinical Microbiology
 Cancro, Jamie A., M.S., Clinical Microbiology
 Carney, Walter P., Ph.D., Microbiology
 Colasante, Georgia, M.S., Clinical Microbiology
 Connor, Christine Carson, M.S., Clinical Microbiology
 Cowardin, Barbara Mitchell, M.S., Clinical Microbiology
 Dougherty, Thomas J., Ph.D., Microbiology
 Francis, Elaine Z., Ph.D., Anatomy
 Frankel, Mark S., Ph.D., Biochemistry
 Glaeser, Bruce S., Ph.D., Pharmacology
 Gwartz, Patricia A., Ph.D., Physiology
 Herr, Daniel L., M.S., Pharmacology
 Himmelreich, Carol M.S., Clinical Microbiology
 Lintner, Valerie Mowrer, M.S., Clinical Microbiology
 Miller, Patricia A., M.S., Microbiology
 Ogletree, Martin L., Ph.D., Physiology
 Ostrawski, Stanley M., M.S., Clinical Microbiology
 Pinder, Richard D., Ph.D., Pharmacology
 Prozialeck, Walter C., Ph.D., Pharmacology
 Reibel-Shinfeld, Diane K., Ph.D., Physiology
 Sonk, Joseph S., Ph.D., Microbiology
 Tanaka, Hiroko, M.S., Clinical Microbiology
 Villazon, Linda P., M.S., Clinical Microbiology
- 1979 Adams, Kathleen O'Looney, M.S., Clinical Microbiology
 Armenti, Vincent T., Ph.D., Anatomy
 Bentsen, Christopher, M.S., Clinical Microbiology
 Berrettini, Wade H., Ph.D., Pharmacology
 Bjorensen, Jean Young, Ph.D., Anatomy
 Callahan, Rosemary M., Ph.D., Microbiology
 Christian, Mildred S., Ph.D., Anatomy
 Churchill, Judy R., Ph.D., Microbiology
 Earle, Roberta, M.S., Clinical Microbiology
 Fitzpatrick, Jean Hirsekorn, Ph.D., Anatomy
 Genovesi, Eugene V., Ph.D., Microbiology
 Golash, Roman, G., M.S., Clinical Microbiology
 Grossman, Mark, H., Ph.D., Pharmacology
 Harkins, Thomas J., M.S., Clinical Microbiology
 Hinkle, Anne M., M.S., Clinical Microbiology
 Hulkower, Christine Wier, M.S., Clinical Microbiology
 Lincoln, Marcia L., M.S., Clinical Microbiology
 Mabrouk, Fadia M., M.S., Preventive Medicine
 Meehan Arias, Kathleen, I., M.S., Clinical Microbiology
 Pashko, Steven, Ph.D., Pharmacology
 Ross, Sherril, M.S., Clinical Microbiology
 Sagemuehl May, Jeri L., M.S., Clinical Microbiology
 Schoemaker, Joyce, Ph.D., Microbiology
 Schwartz, Ira, Ph.D., Pharmacology
 Schwarz, Gail H., M.S., Clinical Microbiology
 Sunnergren, Kenneth P., M.S., Physiology
 Trachte, George J., Ph.D., Physiology
 Tutlane, Victoria, M.S., Clinical Microbiology
 Warnick, Michael R., M.S., Physiology
 Watson Griffey, Vivi-Anne, M.S., Clinical Microbiology
 Weinhold, Kent J., Ph.D., Microbiology
 Wirth, Julia J., Ph.D., Microbiology